

Re: Centralizers, Normalizers and the Center

Source: <http://sci.tech-archive.net/Archive/sci.math/2005-07/msg00791.html>

- *From:* Lawrence House <lawrence.house@xxxxxxxxxxxxx>
 - *Date:* Wed, 06 Jul 2005 21:29:37 EDT
-

I'm confused by the notation. Is $C_H(G)$. Is it (1) the set of all elements in H which commute with all of G ? or (2) $Z(H)$ the centralizer of H ? If (1) it is the intersection of $Z(G)$ with H and therefore a subgroup of G . If (2) it is a subgroup of H and therefore again a subgroup of G .

Also what is meant by $N_H(G)$? Might this be the set of all elements of G that commute with all elements of H ? Is this a subgroup of G ? I'm not sure whether it is or isn't. If H instead of being a subgroup were just one element of G then of course $N(a)$ is a subgroup

.

- *Follow-Ups:*
 - ◆ **[Re: Centralizers, Normalizers and the Center](#)**
 - ◇ *From:* Arturo Magidin
- *References:*
 - ◆ **[Centralizers, Normalizers and the Center](#)**
 - ◇ *From:* themadhatter012
- Prev by Date: **[Re: Very simple FLT proof for odd exponents](#)**
- Next by Date: **[Re: Relative Cardinality](#)**
- Previous by thread: **[Re: Centralizers, Normalizers and the Center](#)**
- Next by thread: **[Re: Centralizers, Normalizers and the Center](#)**
- Index(es):
 - ◆ **[Date](#)**
 - ◆ **[Thread](#)**